

# VSP VISION CARE OUTPERFORMS OTHER VISION PLANS IN MEDICAL COST AVOIDANCE, HEALTHIER OUTCOMES FOR EMPLOYEES



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## Heart disease and diabetes continue to be among the costliest chronic conditions in the United States.

Healthcare costs associated with hypertension account for about \$131 billion, and individuals with hypertension are estimated to face a nearly \$2,000 higher annual healthcare expenditure compared with their non-hypertensive peers<sup>1</sup>. Meanwhile, people with diagnosed diabetes average medical expenditures approximately 2.3 times higher than those who do not have diabetes<sup>2</sup>.

For more than 15 years, VSP<sup>®</sup> Vision Care has partnered with network doctors to identify and engage VSP members with these chronic conditions through its proprietary claims system. This has allowed VSP to better understand the health of members and influence positive health outcomes in a number of ways, from coordinating care with health partners, to identifying eligible members for disease management programs, to sending critical eye exam reminders.

## But have these efforts worked?

That was the question studied by Workpartners, who analyzed the health outcomes of VSP members against those from other vision plans. Workpartners' analysis was based on its proprietary research reference database of more than 4.3 million active employees and their dependents.

## Sample population:

- The study includes data on 162,000 employees and their covered spouses from multiple large employers across the United States.
- "VSP member" group: Members who received an eye exam from a VSP doctor between 2017–2020. Drawn from employers that are clients of both Workpartners and VSP.
- "Other vision plan" group: Members who received an eye exam from a non-VSP vision provider between 2017–2020. Drawn from employers that are clients of Workpartners and other vision plans.
- For both groups, prior to the first diagnosis of the condition, there was no indication of medical care related to the condition considered.
- Data was drawn from the Workpartners Research Reference Database (RRDb). The RRDb contains specific integrated information on more than 4.3 million employees and dependents (118,000 VSP claimants and 44,000 claimants in other vision plans).

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**WORKPARTNERS FOUND THAT VSP MEMBERS IN THE STUDY GROUP ARE GENERALLY HEALTHIER, SUGGESTING THAT VSP NETWORK DOCTORS PLAY A CRITICAL ROLE IN IDENTIFYING CHRONIC CONDITIONS.**

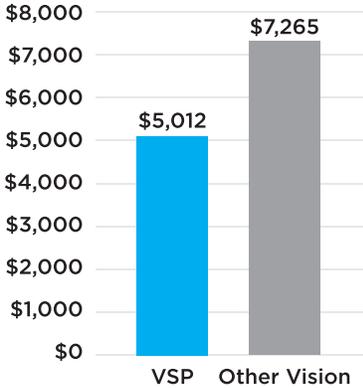


# KEY FINDINGS

## 1. VSP members incur fewer healthcare costs than members of other vision plans in the first year after identification.

### Total Medical Costs

Hypertension



### Total Drug Costs

Hypertension



On a per-person basis, estimated one-year cost avoidance for VSP members with **hypertension** was \$2,633 versus members of other vision plans.

### Total Medical Costs

Diabetes



### Total Drug Costs

Diabetes

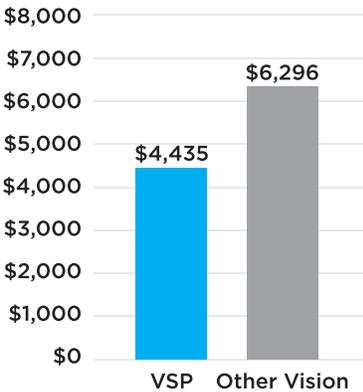


VSP members with **diabetes** showed an estimated one-year cost avoidance of \$1,773 versus members of other vision plans.

## 2. Comorbid medical and pharmacy costs are also lower for VSP Members.

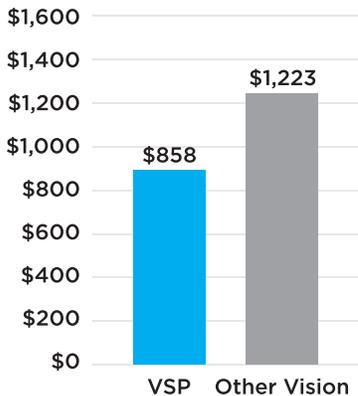
### Comorbidity Medical Costs

Hypertension



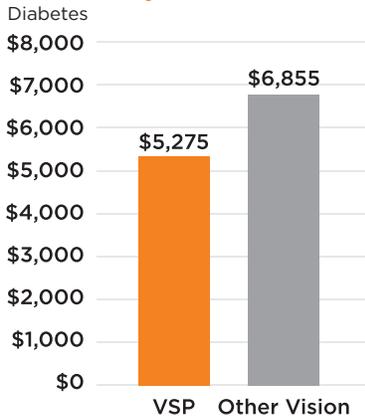
### Comorbidity Drug Costs

Hypertension



For VSP members with **hypertension**, medical and drug costs not associated with this condition were \$1,861 and \$370 lower, respectively.

### Comorbidity Medical Costs



### Comorbidity Drug Costs

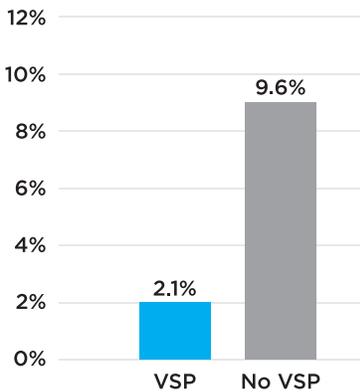


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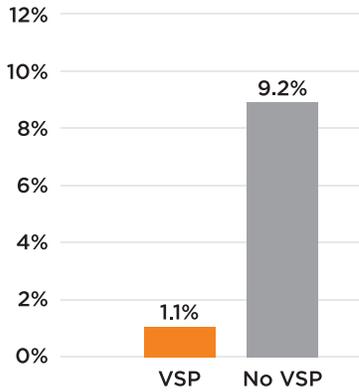
For VSP members with **diabetes**, medical and drug costs not associated with this condition were \$1,580 and \$432 lower, respectively.

### 3. VSP members experience much less job turnover than non-VSP members.

#### Employees with Hypertension



#### Employees with Diabetes



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Members who have conditions reported by VSP doctors were between five and eight times less likely to terminate in the same year.

## CONCLUSIONS

Workpartners found that VSP members in the study group are generally healthier, suggesting that VSP network doctors play a critical role in identifying chronic conditions. This leads to the conclusion that identification through a **WellVision Exam**<sup>®</sup> leads to substantial outcomes, including improved productivity and lowered healthcare costs when compared to other vision plans.

## About Workpartners

Workpartners, The People Activation Company, is part of UPMC. We address human capital challenges with a holistic approach, integrating products and services such as leave and disability, employee assistance, benefits administration, on-site services, and health and wellness services. Our data analytics capabilities share critical insights to employers, converting data into actionable intelligence at an individual employee level. Powered by robust predictive analytics, clinical excellence, and progressive thought leadership, Workpartners delivers people-centric human capital management strategies. Workpartners is headquartered in Pittsburgh, PA, with offices and people around the United States, and serves high-performance organizations in more than 200 industry verticals across the country. For more information, visit [workpartners.com](http://workpartners.com).

## About VSP Vision Care

VSP Vision Care is the only national not-for-profit vision benefits company, providing access to eye care for over 80 million members through a network of more than 39,000 doctors worldwide.

1. <https://www.ahajournals.org/doi/10.1161/JAHA.118.008731>
2. <https://www.diabetes.org/resources/statistics/cost-diabetes>

### APPENDIX

#### Data and methods

- Data were drawn from the Workpartners Research Reference Database (RRDb). The database contains specific integrated information on more than 1.3 million employees and dependents.
- Diabetes and hypertension were the conditions examined in the study.
- Analysis was performed on a group of six VSP clients that are both Workpartners and VSP clients. Other vision provider members were drawn from three large employers within the Workpartners RRDb.
- Data primarily included human resource, lost time, and medical and benefit claims data to identify individuals with a particular disease and to measure key outcome variables.
- Workpartners applied a six-month “wash-out” period prior to the VSP exam date to ensure that those selected did not exhibit earlier knowledge of the given condition.
- Costs and other outcomes were measured on a 12-month basis following each member's exam date. The date of first identification was used for the non-VSP group since logically, there was no exam date.
- Multivariate statistical methods were used to control for differences between comparison groups.

#### Explicit vs. implicit diagnosis and cost accumulation

- Within RRDb, -1/3 of VSP members identified with diabetes have an explicit diagnosis, meaning that there was a medical diagnosis of diabetes within the claim data. For the remaining VSP providers and other vision providers, members were required to have their first Rx/Dx <180 days after vision claim, an implicit diagnosis.
- The 180-day window was validated by examining the cumulative distribution of a second Rx/Dx diagnosis after an explicit diagnosis. For diabetic members, 50% of members had their second diagnosis by 150 days, and for hypertensive members, 50% had a second diagnosis by 224 days.
- Both explicitly- and implicitly-identified individuals contribute to the cost savings and turnover analytics.
- Cost accumulation starts at vision claim date for members with explicit diagnosis, and at medical claim date for members with implicit diagnosis. While every attempt was made to control for differences in the population (including age, gender, salary, other illnesses, and no prior evidence of the specified condition), it is never possible to control for all factors that influence medical costs and business outcomes. Because more robust research design, such as prospective trials, are not possible in a business setting, statistical controls are the best possible alternative. Despite these limitations, the results found in this analysis provide compelling and suggestive indication that those cases reported first through VSP doctors of optometry were significantly less costly than those found among other vision plans or in the medical system.